

## ABSTRACT:

The electric lamp comprises a lamp vessel (1) which is transparent to visible light and which accommodates a light source. At least a part of the lamp vessel (1) is covered with a light-absorbing coating (3). According to the invention, [said] the light-absorbing coating (3) comprises a network which can be obtained by conversion of an organically modified silane  
5 by [means of] a sol-gel process. The organically modified silane is selected from the group formed by compounds of structural formula  $R^I\text{Si}(\text{OR}^{II})_3$ , wherein  $R^I$  is an alkyl or aryl group and  $R^{II}$  is an alkyl group. Preferably,  $R^I$  is  $\text{CH}_3$  or  $\text{C}_6\text{H}_5$  and  $R^{II}$  is  $\text{CH}_3$  or  $\text{C}_2\text{H}_5$ . Nano-sized silica particles having a diameter  $d \leq 50$  nm may be incorporated in the network. The pigment is preferably chosen from the group formed by  $\text{Fe}_2\text{O}_3$ , P-doped  $\text{Fe}_2\text{O}_3$ ,  $\text{ZnFe}_2\text{O}_4$ ,  
10  $\text{ZnO} \cdot \text{Fe}_2\text{O}_4$ ,  $\text{CoAl}_2\text{O}_4$ ,  $\text{Nd}_2\text{O}_5$ ,  $\text{BiVO}_4$  and zirconium praseodymium silicate or mixtures thereof. The light-absorbing coating (3) of the electric lamp according to the invention is optically transparent, substantially free of scattering and stable at temperatures up to  $350^\circ\text{C}$ .  
[Fig. 1]